

OPTICAL RANGE FINDER WITH DIRECTED ATTENTION

Abstract of the Disclosure

An optical range finder for determining the distance comprises a focusing optical member that focuses emitted electromagnetic radiation upon a micro-mirror array. A processor controls the micro-mirror array to direct the focused electromagnetic radiation into a defined radiation pattern consistent with a lower resolution scan over a greater area and a higher resolution scan over a lesser area of interest within the greater area. A transmission optical member focuses the defined radiation pattern toward an object. A reception optical member receives electromagnetic radiation reflected from the object. A detector detects the receipt of the reflected electromagnetic radiation. A timer determines an elapsed time, between transmission of the electromagnetic radiation to the object and receipt of the electromagnetic radiation from the object, to facilitate determination of the distance between the object and the range finder.